

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**

## WEST Search History





DATE: Monday, May 17, 2004

Hide?	Set Name	Query	Hit Count
	<i>DB=USPT,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR</i>		
<input type="checkbox"/>	L20	l2 and l18	1
<input type="checkbox"/>	L19	l14 and L18	27
<input type="checkbox"/>	L18	(first near2 communication near2 (protocol or technology)) same (second near2 communication near2 (protocol or technology))	426
<input type="checkbox"/>	L17	6119180.pn. or 5790800.pn.	4
<input type="checkbox"/>	L16	6119180.pn. and 5790800.pn.	0
<input type="checkbox"/>	L15	l2 and L14	8
<input type="checkbox"/>	L14	l5 or l6 or l7 or l8 or l9 or l10 or l11 or l12	3392
<input type="checkbox"/>	L13	709/268.ccls.	0
<input type="checkbox"/>	L12	709/252.ccls.	67
<input type="checkbox"/>	L11	709/244.ccls.	95
<input type="checkbox"/>	L10	709/238.ccls.	968
<input type="checkbox"/>	L9	709/228.ccls.	693
<input type="checkbox"/>	L8	709/227.ccls.	1211
<input type="checkbox"/>	L7	710/39.ccls.	234
<input type="checkbox"/>	L6	710/37.ccls.	97
<input type="checkbox"/>	L5	710/36.ccls.	504
<input type="checkbox"/>	L4	L2 same (communication near3 message)	6
<input type="checkbox"/>	L3	L2 same message	22
<input type="checkbox"/>	L2	L1 same (establish\$4 near2 communication near2 (link\$4 or path or channel))	80
<input type="checkbox"/>	L1	(communication near2 manag\$4)	8632

END OF SEARCH HISTORY

[First Hit](#)   [Fwd Refs](#)

Generate Collection

Print

L15: Entry 3 of 8

File: USPT

Feb 11, 2003

DOCUMENT-IDENTIFIER: US 6519643 B1

TITLE: Method and system for a session allocation manager ("SAM")

Current US Original Classification (1):  
709/227

Current US Cross Reference Classification (2):  
709/228

## CLAIMS:

47. A session allocation manager, comprising: a first interface that transmits instructions for creating and controlling sessions, wherein each session contains directions for managing data communications between a client of a plurality of clients and a host of a plurality of hosts; a second interface that accesses a requested session and allocates the requested session to the client of the plurality of clients that has requested the requested session; and a third interface that establishes a communications link with the host of the plurality of hosts according to instructions provided by at least one session of the sessions and makes the communications link available to the at least one session of the sessions.

52. In a computing system performing a method for managing multiple connections between clients and hosts, a computer-readable medium having a data structure, comprising: a first data field that holds instructions for creating and controlling a plurality of sessions, wherein each session contains directions for managing data communications between a client and a host; a second data field that holds instructions for accessing a session of the plurality of sessions and allocating the session to a client that has requested the session; a third data field that holds instructions for establishing a communications link with the host; and a fourth data field that holds instructions for making the communications link available to at least one session of the plurality of sessions.

[First Hit](#)   [Fwd Refs](#)

Generate Collection

Print

L15: Entry 5 of 8

File: USPT

Mar 16, 1999

DOCUMENT-IDENTIFIER: US 5884272 A

TITLE: Method and system for establishing and maintaining user-controlled anonymous communications

Detailed Description Text (143):

Returning to FIG. 5, central controller 200 can establish an anonymous communications channel between a party and requester (step 530). In this way, the party and the requester can reveal or request information to and from each other. As described above, the communications channel can be real-time or non-real-time. FIG. 8 shows a flow diagram illustrating one embodiment of a method for opening a communications channel between party terminal 300 and requester terminal 400 and FIG. 9 shows a flow diagram illustrating one embodiment of a method for managing the communication between party terminal 300 and requestor terminal 400. After receiving a communications channel request from a requestor to open a communications channel with a party (step 800), central controller 200 transmits a communication request to the party at party terminal 300 (step 810). Preferably, the communication request asks the party whether it agrees to engage in a real-time or non-real-time communication with the requestor.

Current US Cross Reference Classification (3):709/227

[First Hit](#)   [Fwd Refs](#)

Generate Collection

Print

L15: Entry 7 of 8

File: USPT

Aug 4, 1998

DOCUMENT-IDENTIFIER: US 5790800 A

TITLE: Client application program mobilizer

Detailed Description Text (58):

The interceptor 700 includes procedures 710, one-to-one corresponding to each of the sockets of the DLL 620. However, the procedures 710, depending on a state of the communications connection, intercept the execution flow so that the appropriate procedures of the communication manager 200 can be executed. The manager 200 can call the transport procedures 630 to, for example, "bind" a socket to a physical communications port of the computer 110, after a communications link has been established using the CDI and communications database as described above.

Current US Original Classification (1):709/227

First Hit   Fwd Refs

End of Result Set

☐ **Generate Collection** **Print**

L20: Entry 1 of 1

File: USPT

Sep 9, 2003

DOCUMENT-IDENTIFIER: US 6618745 B2

TITLE: Linking device in a process control system that allows the formation of a control loop having function blocks in a controller and in field devices

Detailed Description Text (44):

Generally speaking, the functional blocks 100 of the linking device 28 cooperate to enable the linking of controller resident function block information with function block information resident in one or more of the field devices 22-26. More specifically, the function block data manager 116 coordinates the linking of function blocks between the controller 18 and the field devices 22-26. For example, the database manager 118 may store information to be published on the protocol bus 30 in the memory 106. This stored information may include function block information received by the linking device 28 from the controller 18, such as, for example, the output of the PID function block 46. The function block data manager 116, at the appropriate time according to the link active schedule (which is stored in the memory 106), establishes a communication link via the connection manager 110 and the communication stack 104 to publish the information (e.g., the output of the PID function block 46) on the protocol bus 30.

## CLAIMS:

1. A method of interfacing with a plurality of field devices in a process control system having a controller and a user interface communicatively coupled together, a linking device coupled to the controller, and a plurality of field devices communicatively coupled to the linking device via a communication network that uses a first communication protocol, the method comprising: monitoring substantially all communications on the communication network using the linking device; selectively processing at least some of the monitored communications in the linking device to obtain first function block information associated with a first function block implemented by one of the plurality of field devices; and sending the first function block information to a second function block implemented by the controller, wherein the first function block information is sent to the controller via a second communication protocol different than the first communication protocol, wherein the first function block and the second function block are part of a control loop.

2. The method of claim 1, further comprising: generating third function block information associated with a third function block implemented by the controller; receiving the third function block information at the linking device via the second communication protocol; and sending the third function block information to at least a fourth function block via the first communication protocol, wherein the fourth function block is implemented by one of the field devices.

16. A linking device for interfacing with a plurality of field devices having function blocks communicatively coupled via a communication network that uses a first communication protocol and a controller, the linking device comprising: a stack communicatively coupled to the communication network that uses the first communication protocol to monitor substantially all communications on the communication network; a connection manager that uses the communication stack to coordinate communications on the communication network; a function block data manager that selectively processes at least some of the monitored communications to

produce function block information that is associated with a function block implemented by at least one of the field devices; and a database manager that sends the function block information to the controller via a second communication protocol and receives another function block information associated with another function block implemented by the controller to be sent to said at least one of the field devices as part of a control loop different than the first communication protocol.

28. A field device interface system for use in a process control system having a controller and a user interface communicatively coupled together, a linking device having a processor therein coupled to the controller, and a plurality of field devices communicatively coupled to the linking device via a communication network that uses a first communication protocol, comprising: a computer readable memory in the linking device; a monitoring routine stored on the memory and adapted to be executed by the processor that monitors substantially all communications on the communication network; a communications processing routine stored on the memory and adapted to be executed by the processor that selectively processes at least some of the monitored communications to produce first function block information associated with a first function block implemented by one of the plurality of field devices; and a linking routine stored on the memory and adapted to be executed by the processor that sends the first function block information to a second function block implemented by the controller, wherein the first function block information is sent to the controller via a second communication protocol different than the first communication protocol wherein the first function block and the second function block are part of a control loop.

29. The field device interface system of claim 28, wherein the linking routine is further adapted to: receive third function block information from the controller via the second communication protocol, wherein the third function block information is associated with a third function block implemented by the controller; and send the third function block information to at least a fourth function block via the first communication protocol, wherein the fourth function block is implemented by one of the field devices.

[First Hit](#)   [Fwd Refs](#)

End of Result Set

☐ [Generate Collection](#) [Print](#)

L15: Entry 8 of 8

File: USPT

May 14, 1996

DOCUMENT-IDENTIFIER: US 5517662 A

TITLE: Multiprocessor system with distributed memory

Detailed Description Text (18):

In this communications management system, an application defines a name space of buffers in available memory and a tag that specifies the class of how the name space will be used (semantics) in order to establish a communication path between logical processors. The semantics are bound to the name space until such time as the application changes the tags associated with the buffer or releases the buffer. From an application perspective, data is sent from one logical buffer to another, using the information defined in the class established by the application. It is done by hardware external from the logical processor freeing the processor from handling communication interrupts. The logical processor invokes the functions of the communications manager and in a group of cooperating and communicating logical processors each processor must have a unique identifier.

Current US Cross Reference Classification (3):710/39